

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend Claim 1 as follows:

1. (Currently-Amended) A joint restraint assembly for connecting pipe ends together, or to other objects, by gripping the outer surface of the pipe, the joint restraint assembly comprising:

a body encircling the pipe, with said body having a plurality of cavities adjacent the pipe and at least one set of a corresponding plurality of threaded bores disposed through said body, each threaded bore of said at least one set of a corresponding plurality of threaded bores being in communication with a respective cavity; and

a segment disposed within each of said cavities in said body, ~~and configured to make contact between said body and the surface of the pipe so as to provide resistance to pipe pull-out in proportion to~~ said segment comprising a first portion that contacts a surface of said cavity and a second portion that penetrates the outer surface of the pipe, said segment pivoting about said first portion to drive said second portion deeper into the outer surface of the pipe as the mechanical or internal pressure loading applied to the pipe increases; ~~and~~

~~————— a threaded bolt extending through each of said threaded bores to pre-load said respective segment into initial contact with the pipe surface.~~

2. (Currently-Amended) The joint restraint assembly of Claim 1 further comprising a threaded bolt extending through each of said threaded bores, said threaded bolt displacing said segment so that said second portion initially engages said outer surface of the pipe, and wherein said segment pivots about said first portion while losing contact with said threaded bolt ~~wherein the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure is independent of said threaded bolts.~~

3. (Currently Amended) The joint restraint assembly of Claim 1 wherein said segment ~~is configured to~~ transmits the load from the pipe to said body while loading said segment primarily in compression.

4. (Currently Amended) The joint restraint assembly of Claim 3 wherein said second portion segment further comprises at least one edge which penetrates the outer ~~capable of penetrating the external surface of the pipe.~~

5. (Currently Amended) The joint restraint assembly of Claim 4 wherein said at least one edge forms a relief angle, as measured from the outer surface of the pipe surface, that is 25 to 35 degrees, ~~so as to optimize both the structural integrity of the segment edge and the ability of the edge to penetrate the pipe surface.~~

6. (Currently Amended) The joint restraint assembly of Claim 3 wherein the circumferential length of all of said segments and their edges comprises a substantial portion of the pipe periphery; ~~thereby distributing the force transmitted through contact with the pipe more uniformly around the~~

~~pipe periphery, and distributing the force transmitted through contact with the body more uniformly around the body, independently of said threaded bolts.~~

7. (Currently Amended) The joint restraint assembly of Claim 1 wherein the shape of the body is optimized to resist the forces imparted to it by contact with said segments, said body comprising:

a substantially cylindrical portion adjacent to the pipe surface with a flange extending radially therefrom; and

wherein said body comprises a shape and wall thickness ~~to~~ that compensates for the presence of said cavities ~~to~~ for maintaining the strength and rigidity of said body.

8. (Original) The joint restraint assembly of Claim 1 further comprising an elastomeric material positioned between each of said segments and their corresponding cavities, said elastomeric material disposing said segment in said cavity in an optimum position for self-actuation or for retaining said segment in said cavity for shipping, handling and installation.

9. (Currently Amended) ~~The~~ A joint restraint assembly for connecting pipe ends together, or to other objects, by gripping the outer surface of the pipe, the joint restraint assembly comprising:

a body encircling the pipe, with said body having a plurality of cavities adjacent the pipe and at least one set of a corresponding plurality of threaded bores disposed through said body, each threaded bore of said at least one set of a

corresponding plurality of threaded bores being in communication with a respective cavity; of Claim 1 wherein said segment

a segment disposed within each of said cavities in said body, said segment comprising a first portion that contacts a surface of said cavity and comprises a cam surface that engages and rotates against the outer surface of the pipe, said segment pivoting about said first portion so that said cam surface rotates against the outer surface of the pipe as the surface to resist pipe pull-out at comparatively high levels of mechanical loading or internal pipe pressure increases proportion to the loading.

10. (Currently Amended) The joint restraint assembly of Claim 9 further comprising a threaded bolt extending through each of said threaded bores, said threaded bolt displacing said segment so that said cam surface initially engages said outer surface of the pipe, and wherein segment pivots about said first portion while losing contact with said threaded bolt wherein the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure is independent of said threaded bolts.

11. (Currently Amended) The joint restraint assembly of Claim 9 wherein said segment is ~~configured to transmit~~ the load from the pipe to said body while loading said segment primarily in compression.

12. (Previously Presented) The joint restraint assembly of Claim 9 wherein said cam surface further comprises a surface texture for engaging the pipe surface.

13. (Currently Amended) The joint restraint assembly of Claim 12 further comprising a threaded bolt extending through each of said threaded bores, said threaded bolt displacing said segment so that said segment pivots about said first portion while losing contact with said threaded bolt wherein ~~the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure is independent of said threaded bolts.~~

14. (Currently Amended) The joint restraint assembly of Claim 12 wherein said segment is ~~configured to transmit~~ the load from the pipe to said body while loading said segment primarily in compression.

Claims 15- 18 (Cancelled).

19. (New) The joint restraint assembly of Claim 4 wherein said first portion comprises a corner opposite said at least one edge, said corner contacting said surface of said cavity.

20. (New) The joint restraint assembly of Claim 9 wherein said first portion comprises a corner opposite said cam surface, said corner contacting said surface of said cavity.